# IN THE UNITED STATES COURT OF APPEALS FOR THE SIXTH CIRCUIT

No. 11-2328

### UNITED STATES,

Plaintiff-Appellee,

U.

#### DTE ENERGY CORP.

Defendant-Appellant.

On Appeal From The U.S. District Court For The Eastern District Of Michigan, No. 10-13101 (Hon. Bernard A. Friedman).

#### BRIEF FOR THE UNITED STATES AS APPELLANT

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### **GLOSSARY**

U.S. Environmental Protection Agency

MDEQ Michigan Department of Environmental Quality

NSR New Source Review

EPA

BACT Best Available Control Technology

SIP State Implementation Plan

PSD Prevention of Significant Deterioration

NO<sub>x</sub> Nitrogen Oxides

SO<sub>2</sub> Sulfur Dioxide

CAA Clean Air Act

DTE Energy Corp., parent of Detroit Edison

ESGU Electrical Steam Generating Unit (i.e. a power plant)

UARG Utilities Air Regulatory Group (a power plant trade

association that includes Detroit Edison)

### CLEAN AIR ACT CODIFICATION GUIDE

Clean Air Act Section	<u>Codified at:</u>
§ 111 - Definitions	42 U.S.C. § 7411
§ 113 - Federal Enforcement	42 U.S.C. § 7413
§ 165 - Preconstruction Requirements (PSD program)	42 U.S.C. § 7475
§ 167 - Enforcement (PSD-specific)	42 U.S.C. § 7477
§ 169 - Definitions (PSD-specific)	42 U.S.C. § 7479
§ 304 - Citizen Suits	42 U.S.C. § 7604

# TABLE OF CONTENTS

GLOSSARY	Υi
CLEAN AI	R ACT CODIFICATION GUIDEi
TABLE OF	CONTENTSii
JURISDIC'	ΓΙΟΝΑL STATEMENT1
STATEME	NT OF THE ISSUE1
STATEME	NT OF THE CASE1
STATEME	NT OF FACTS3
A.	Statutory Background
В.	Factual Background10
C.	Procedural History17
STANDAR	D OF REVIEW23
SUMMARY	OF ARGUMENT23

ARGUM	IEN	Т	25
		Can Enforce PSD Requirements At Unit #2 Based On Its Analysis Of Future Emissions.	25
	A.	EPA Must Be Able To Enforce The Act Before Construction By Using Emissions Projections	26
	В.	EPA Can Enforce PSD Requirements Based On Emissions Projections Even <i>After</i> Construction	29
	C.	EPA Can Also Enforce The Act Based On Post- Construction Monitoring Data, But Neither The Act Nor Regulations Limit EPA To That Approach.	31
		.F.R. § 52.21(r)(6) Facilitates—Not Eliminates—rcement Based On Emissions Projections	35
	A.	40 C.F.R. § 52.21(r)(6) Can Only Be Read To Facilitate Enforcement Based On Emissions Projections.	36
	В.	The History Of The 2002 Reform Rules Confirms That 40 C.F.R. § 52.21(r)(6) Is Only A Recordkeeping Requirement.	42
	C.	This Court <i>Must</i> Defer To EPA's Interpretation Of Its Own Regulation Unless "Plainly Erroneous."	48
CONCL	USI	ON	55

# TABLE OF AUTHORITES

## **CASES**:

Alabama Power v. Costle, 636 F.2d 323 (D.C. Cir. 1979)
Alaska Dep't of Envtl. Conservation v. EPA, 540 U.S. 461 (2004)
Auer v. Robbins, 519 U.S. 452 (1997)23,48
Burchett v. Kiefer, 310 F.3d 937 (6th Cir. 2002)22
Couer Alaska, Inc. v. Se. Alaska Conservation Council, 129 S. Ct. 2458 (2009)
Environmental Defense v. Duke Energy, 549 US 561 (2007)
In re Tennessee. Valley Authority, 9 E.A.D. 357, 2000 WL 1358648 (EAB Sept. 15, 2000)
Kentucky Resources Council, Inc. v. EPA, 467 F.3d 986 (6th Cir. 2006)
Kentucky Waterways Alliance v. Johnson,           540 F.3d 466 (6th Cir. 2008)         49
National Parks Conservation Ass'n v. TVA, 480 F.3d 410 (6th Cir. 2007)
National Parks Conservation Ass'n v. TVA, 618 F. Supp. 2d 815 (E.D. Tenn. 2009)
Navistar International Transportation Corp v. EPA, 858 F.2d 282 (6th Cir. 1988)

New York v. EPA, 413 F.3d 3 (D.C. Cir. 2005)
Puerto Rican Cement Co., Inc. v. EPA, 889 F.2d 292 (1st Cir 1989)
Stinson v. United States, 508 U.S. 36 (1993)
Talk America, Inc. v. Mich. Bell Tel. Co., 131 S. Ct. 2254 (2011)
Time Warner Entm't Co., L.P. v. Everest Midwest Licensee, L.L.C., 381 F.3d 1039 (10th Cir. 2004)
United States v. Cinergy Corp., 384 F. Supp. 2d 1272 (S.D. Ind. 2005)30
United States v. Cinergy Corp., 458 F.3d 705 (7th Cir. 2006)
United States v. Duke Energy Corp., 2010 WL 3023517 *5 (M.D.N.C. 2010)
United States v. Ohio Edison, 276 F. Supp. 2d 829 (S.D. Ohio 2003)
United States v. S. Ind. Gas & Elec., 2002 WL 1629817 *2 (S.D. Ind. 2002)
United States v. Xcel Energy, 759 F. Supp. 2d. 1106 (D. Minn. 2010)28
Whitman v. Am. Trucking Ass'ns, 531 U.S. 457 (2001)

Wis. Elec. Power Co. v. Reilly (WEPCo)	
893 F.2d 901 (7th Cir. 1990)	6,27,35,43
Wolf Creek Collieries v. Robinson, 872 F.2d 1264 (6th Cir. 1989)	52
STATUTES:	
Clean Air Act	
42 U.S.C. § 7411	
42 U.S.C. § 7413	
42 U.S.C. § 7470	
42 U.S.C. § 7475	
42 U.S.C. § 7477	
42 U.S.C. § 7479	
42 U.S.C. § 7604	28
RULES and REGULATIONS:	
40 C.F.R. § 52.21(a)(2)	52
40 C.F.R. § 52.21(a)(2)(iii)	6,49
40 C.F.R. § 52.21(a)(2)(iv)(a)	5,52,53
40 C.F.R. § 52.21(a)(2)(iv)(b)	5,27,31,51
40 C.F.R. § 52.21(b)(2)(i)	5,28,53,54
40 C.F.R. § 52.21(b)(2)(iii)(a)	5,28,53,54
40 C.F.R. § 52.21(b)(21)(iv) (1988)	43
40 C.F.R. § 52.21(b)(23)(i)	5,13
40 C.F.R. § 52.21(r)(1)	26
40 C F R § 52 21(r)(6)	nassim

#### JURISDICTIONAL STATEMENT

The district court had jurisdiction under 28 U.S.C. § 1331 and entered final judgment on August 23, 2011. The United States filed a timely notice of appeal on October 20, 2011, and this Court has jurisdiction under 28 U.S.C. § 1291.

#### STATEMENT OF THE ISSUE

A Clean Air Act regulation requires air pollution sources to keep records before starting construction work at their plants and to monitor post-construction emissions. Did the district court err by interpreting that regulation to bar certain Clean Air Act enforcement actions, or should the court instead have deferred to EPA's reading of its own rule?

#### STATEMENT OF THE CASE

Detroit Edison<sup>1</sup> built the Monroe Power Plant nearly forty years ago. Because of their age, each of its four generating "units" were originally grandfathered out of certain Clean Air Act requirements, including pollution control requirements. That grandfathering period would end as Detroit Edison overhauled the plant's operating "units."

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<sup>&</sup>lt;sup>1</sup> Detroit Edison is a wholly-owned subsidiary of DTE Energy Co. This brief refers to both defendants jointly as "Detroit Edison."

In March 2010, Detroit Edison began a \$65 million overhaul project at Monroe's aging Unit #2 to address the unit's escalating maintenance downtime. Hours before starting construction, the company dropped a short letter in the mail to state regulators. Detroit Edison said that it had sent the letter because of an EPA recordkeeping regulation. That regulation requires power plant operators to provide notice and keep records when they determine that a planned project will nearly—but not quite—end an older plant's grandfathered status. The letter asserted that the Unit #2 overhaul was nowhere near the relevant thresholds and that the project did not trigger any recordkeeping requirements, let alone end the unit's grandfathered status.

EPA filed suit to prove that the Unit #2 overhaul had ended its grandfathering period and to force the company to install pollution controls. The district court rejected EPA's suit without reviewing the agency's substantive claims. It held instead that Detroit Edison had foreclosed EPA's lawsuit merely by mailing its notice letter. According to the court, once a company files its own determination that a planned project does not trigger pollution control requirements, EPA cannot

challenge that determination. The court's ruling disregarded the Clean Air Act's structure, the regulation's text and history, and its own duty to defer to EPA's interpretation of Clean Air Act regulations.

#### STATEMENT OF FACTS

## A. Statutory Background

The Clean Air Act establishes various programs to protect air quality. This appeal concerns a part of the New Source Review (NSR) program called the Prevention of Significant Deterioration (PSD) program.<sup>2</sup> 42 U.S.C. §§ 7470-7492, 7501-7515. As its name suggests, the PSD program exists to prevent air quality deterioration in areas where ambient air quality already meets regulatory standards. 42 U.S.C. § 7470(1),(3). The heart of the PSD program is 42 U.S.C. § 7475, which starts by saying that "[n]o major emitting facility" may be constructed in these "attainment" areas unless its operator satisfies certain requirements before beginning construction. *Id.* § 7475(a). Among other

<sup>2 &#</sup>x27;

<sup>&</sup>lt;sup>2</sup> The PSD program applies to areas that meet air quality standards. NSR also includes a program called Nonattainment New Source Review (NNSR) that applies to areas where air quality is below those standards. Both PSD and NNSR apply here because air quality in the Monroe area meets air quality standards for some pollutants but not others. But because the relevant PSD and NNSR provisions are similar, we refer only to the PSD provisions here.

things, the operator has to get a permit and install modern pollution controls. *Id.* § 7475(a)(1),(4). In Clean Air Act parlance, the permit is known as a "PSD permit" and the requisite pollution controls are called "best available control technology" or just "BACT." *Id.* § 7479 (defining terms); *see generally National Parks Conservation Ass'n v. TVA*, 480 F.3d 410, 412-413 (6th Cir. 2007).

Many older air pollution sources were built before Congress created the PSD program. The Act treats these old plants more leniently than new ones by grandfathering them out of PSD requirements. But Congress also expected that "old plants will wear out and be replaced by new ones that will be subject to . . . more stringent pollution controls." *United States v. Cinergy Corp.*, 458 F.3d 705, 709 (7th Cir. 2006).

Congress prevented operators from frustrating the Act by overhauling aging sources instead of building newer and cleaner ones. It did this by defining the kind of "construction" that triggers PSD requirements to include not just new construction, but also "modification" of existing facilities. 42 U.S.C. § 7479(2)(C). Congress then defined a triggering "modification" as, among other things, any

physical change to a facility "which increases the amount of any air pollutant emitted by such source." *Id.* § 7411(a)(4). Just as an existing homeowner can only ignore new building codes until he undertakes a major renovation, a grandfathered source owner can only ignore PSD permitting and pollution control requirements until it "modifies" the source. *See Alabama Power v. Costle*, 636 F.2d 323, 400 (D.C. Cir. 1979).

## 1. Preconstruction Review

Because an operator has to get a PSD permit before starting work on a triggering modification, the operator has to determine *in advance* whether any planned project triggers PSD requirements. It does this by projecting whether the project will increase the source's emissions. Essentially, the operator makes this projection by comparing historical emissions data with estimates of post-construction emissions. *See* 40 C.F.R. § 52.21(a)(2)(iv)(a)-(c). If the operator projects that construction "would result in" an emissions increase that exceeds prescribed thresholds, 40 C.F.R. § 52.21(b)(23)(i), the project is a "major modification" as defined in 40 C.F.R. § 52.21(b)(2)(i). And before

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<sup>&</sup>lt;sup>3</sup> To trigger PSD, a projected emissions increase must also exceed the threshold after accounting for other emissions changes at the source. 40 C.F.R. § 52.21(a)(2)(iv)(a). The specifics of that analysis, known as "netting," are not relevant to this action.

starting work on a "major modification," an operator has to do several things including getting a PSD permit and installing pollution controls before restarting operation. 40 C.F.R. § 52.21(a)(2)(iii). This ensures, among other things, that the operator installs controls "when they can be most effective, at the time of new or modified construction." *Wis. Elec. Power Co. v. Reilly*, 893 F.2d 901, 909 (7th Cir. 1990).

When a construction project triggers PSD requirements, the Act requires the operator to install the best available pollution controls on the previously-grandfathered source. Those controls often reduce the plant's emissions *below* the pre-construction baseline. The Clean Air Act thus requires an operator who "modifies" a grandfathered source to bring the aging source up to modern standards.

## 2. <u>PSD Enforcement</u>

Because of the pre-construction nature of the PSD program, the Clean Air Act includes a unique provision that allows EPA<sup>4</sup> to enforce PSD requirements *before* an operator begins a construction project. The Act's PSD-specific enforcement provision says:

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<sup>&</sup>lt;sup>4</sup> While we refer to EPA throughout the brief, local permitting authorities and citizens also have authority to address PSD violations.

The [EPA] Administrator shall, and a State may, take such measures, including issuance of an order, or seeking injunctive relief, as necessary to prevent the construction or modification of a major emitting facility which does not conform to the requirements of this part.

42 U.S.C. § 7477 (emphasis added). And the Act's overall enforcement provision says that EPA may file a lawsuit for injunctive relief or civil penalties against any person who "has violated, or is in violation of" any of its statutory or regulatory provisions. 42 U.S.C. § 7413 (emphasis added). EPA can use these authorities to prevent an operator from starting a construction project, to halt the project after it begins, or to require the operator to apply for a PSD permit and install pollution controls after construction is complete.

#### 3. PSD Recordkeeping

Over the years, EPA has promulgated a series of recordkeeping regulations to facilitate PSD enforcement. This appeal addresses the district court's interpretation of the most recent of those regulations.

In 2002, EPA promulgated a number of new PSD regulations in a package called the NSR Reform Rules. One of the new regulations revised PSD recordkeeping requirements. 40 C.F.R. § 52.21(r)(6).5

<sup>5</sup> Defendants cited 40 C.F.R. § 52.21 in describing how EPA's PSD rules

operate, and the lower court did the same. We adopt that approach here

Before 2002, EPA regulations required power plants—and only power plants—to keep records of their emissions projections for any construction project. The new rules added recordkeeping requirements for all operators. But the new requirements only apply when an operator (1) determines in advance that a project is not a PSDtriggering "major modification," but (2) also recognizes that there is a "reasonable possibility" that the project does trigger PSD requirements. Id. § 52.21(r)(6). The current regulations define the phrase "reasonable possibility" phrase in numeric terms—for instance, there is a "reasonable possibility" that a project will trigger PSD requirements if an operator predicts that it will increase sulfur dioxide emissions by more than 20 tons per year, but less than the 40 tons per year that would actually trigger those permitting requirements. 6 Id.

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as well, but we note that Michigan's EPA-approved state regulations directly govern some portions of this matter. That complication can be ignored here because relevant state and federal regulations are substantively the same; Michigan's PSD rules even incorporate federal PSD regulations" [f] or the purpose of clarifying the definitions in these [State] rules." Mich. Admin. Code R. 336.2801a.

<sup>&</sup>lt;sup>6</sup> As originally promulgated in 2002, Section 52.21(r)(6) did not define what would constitute a "reasonable possibility" that triggers its recordkeeping requirements. EPA added the numeric criteria in Section 52.21(r)(6)(vi) later to respond to the D.C. Circuit's decision in *New York I. See* 72 Fed. Reg. 72,607, 72,608 (Dec. 21, 2007). Michigan

§ 52.21(r)(6)(vi) (defining "reasonable possibility"). If the operator's project falls within that zone, the operator must "document and maintain a record" that: (a) describes the project; (b) identifies the affected source; and (c) explains the basis for the operator's emissions projection. *Id.* § 52.21(r)(6)(i))(a-c). Power plants—and only power plants—must affirmatively send copies of their records to permitting authorities before starting construction. *Id.* § 52.21(r)(6)(ii).

If an operator projects a "reasonable possibility" of a triggering emissions increase, 40 C.F.R. § 52.21(r)(6) also requires the operator to monitor post-construction emissions from its project for either five or ten years. The operator must use the data to compute the plant's annualized post-construction emissions, and then create and preserve a record of those computations. *Id.* § 52.21(r)(6)(iii). EPA can review those records to determine whether to bring an enforcement action to ensure compliance with PSD requirements, Again, power plants—and only

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incorporated those criteria into its PSD rules before the Monroe Unit #2 overhaul and Detroit Edison cited those rules in its notice letter. EPA approved the revised Michigan PSD rules after the project. 75 Fed. Reg. 59,081 (Sept. 27, 2010).

<sup>&</sup>lt;sup>7</sup> An operator must monitor for at least five years, but must monitor for ten years if its project involves an increase in design capacity or potential to emit pollution. *Id.* § 52.21(r)(6)(iii).

power plants—must affirmatively send a copy of their annual emissions records to permitting authorities.  $Id. \S 52.21(r)(6)(iv)$ .

The reason this recordkeeping regulation devotes special attention to power plants is because power plants discharge more air pollutants than any other category of sources. They account for 85% of the nation's sulfur dioxide (SO<sub>2</sub>) emissions and 76% of the nation's nitrogen oxide (NO<sub>x</sub>) emissions from stationary sources. 67 Fed. Reg. 80,186, 80,204(3) (Dec. 31, 2002). These pollutants cause premature deaths and exacerbate respiratory illnesses like asthma. EPA reasoned that since power plants emit a "disproportionate amount" of the nation's air pollutants, it "makes sense" for them to affirmatively report their emissions projections and monitoring data so that regulators can review them. *Id*.

## B. Factual Background

In the early 1970s, Detroit Edison built the Monroe Power Plant in Monroe, Michigan, which is about forty miles southwest of Detroit. It is the eleventh largest coal fired power plant in the nation. Dkt. #8, Ex.1 at 2 (Chinkin Decl.). Because Detroit Edison built all four of the plant's operating "units" before the advent of the PSD program, it did

not install modern pollution controls at any of them. The Clean Air Act therefore grandfathered all four units out of PSD permitting and pollution control requirements until and unless Detroit Edison "modified" them. For over 30 years, Detroit Edison operated the four units without modern pollution control devices. Detroit Edison has chosen to install modern emissions controls at two of the four units—Units #3 and #4—but has chosen not to install controls on Units #1 or #2 until at least 2014.

As other operators have upgraded and/or retired their previously-grandfathered generating units, Monroe Unit #2 has become the largest unit-level source of sulfur dioxide and nitrogen oxides not just at Monroe, but in the entire State of Michigan. It discharges on average over 26,403 tons of sulfur dioxide and 9,618 tons of nitrogen oxides each year. Dkt. #8, Ex.1 at 4 (Chinkin Decl.). To put those figures in perspective, Unit #2 discharges more sulfur dioxide every year than a million passenger cars, or all the heavy trucks in Michigan, Illinois, Ohio, and Indiana combined. Id. at 5,28. Those emissions damage air quality not just in nearby Detroit, but throughout Michigan and northern parts of Ohio, Indiana and Illinois. Id. at 20-21.

## 1. <u>Detroit Edison's Overhaul Of Unit #2</u>

On March 13, 2010 Detroit Edison began an immense construction project at Monroe Unit #2. The company shut down the unit for nearly three months and spent \$65 million on the project, which required over 600 plant workers and specially-hired contractors to work double shifts for 83 days. Dkt. #8, Ex.2D (April 22, 2010 News Article). A front-page newspaper article entitled "Extreme makeover: Power plant edition" described the project as one of the largest shutdowns in Monroe's history. Id. It also printed photographs of a "giant access" hole that Detroit Edison had cut in the roof of Unit #2 to remove and replace key equipment that had been in place since it was first built. Plant officials would later admit to EPA that the overhaul was necessary because of "increased forced outages." Dkt. #8, Ex.2A at 4 (EPA Inspection Notes). The aging plant was breaking down increasingly frequently, requiring more maintenance, and running less often.

## 2. <u>Detroit Edison's Last-Minute Recordkeeping Filing.</u>

A few hours before starting work on the overhaul, Detroit Edison dropped a letter in the mail. In that letter, Detroit Edison informed Michigan regulators that it was starting several "major projects" at Unit #2 the next day. Dkt. #8, Ex.2C (March 12, 2010 Letter). It

projected that Unit #2's already enormous sulfur dioxide and nitrogen oxide emissions would increase after the upgrade by 3,701 tons and 4,096 tons respectively. *Id.* In relative terms, this would be a 10% increase in sulfur dioxide emissions and a nearly 40% increase in nitrogen oxide emissions. In legal terms, these predictions were a hundred times higher than thresholds for triggering PSD requirements. 40 C.F.R. § 52.21(b)(23)(i). And in human terms, it would mean an additional 12-13 deaths per year. Dkt. #8, Ex.12 at ¶¶ 67-71, 116-120 (Schwartz Decl.).

Detroit Edison's letter nevertheless informed state regulators that the company would not apply for a PSD permit or install pollution controls. It advanced two preemptive defenses to PSD liability. First, despite the fact that construction work at Unit #2 would involve an unprecedented shutdown and replacement of key pieces of the plant's original equipment, Dkt. #8, Ex.2D, and despite internal descriptions of the project as a capital expenditure, Dkt. #8, Ex.2F (under seal), the company claimed that its overhaul was "routine maintenance." Dkt. #8, Ex.2C at 1; see generally 40 C.F.R. § 52.21(b)(2)(iii)(a). Second, Detroit Edison claimed that that the immense emissions increases it had

predicted did not trigger PSD requirements because they would be legally "unrelated" to the overhaul project. *Id*. So Detroit Edison said its giant overhaul was a non-event for Clean Air Act purposes. The company would not install pollution controls on Unit #2 and would continue to treat it as a grandfathered source.

Because the company asserted that all of its projected emissions increases were legally unrelated to the overhaul, it also claimed that there was "no reasonable possibility" that the project would trigger PSD requirements. Dkt. #8, Ex.2C at 1 (March 12, 2010 Letter). Therefore, it said, nothing in federal or state regulations—including 40 C.F.R. § 52.21(r)(6)—required it to record emissions projections or provide copies to regulators in advance of construction. But Detroit Edison said it had included all necessary information in its letter anyway.

## 3. <u>EPA's Efforts To Resolve The Violation</u>

EPA learned of Detroit Edison's letter when Sierra Club sent the agency a copy on May 21, 2010. By that time, the \$65 million overhaul was well under way. EPA sent two inspectors to learn about the work on June 2, 2010. Dkt #8, Ex.2A. EPA issued Detroit Edison a notice of violation two days later. Dkt. #8, Ex.2E. The notice informed Detroit

Edison that the Unit #2 overhaul was a "modification" within the meaning of the Clean Air Act's PSD provisions. EPA explained that the company should have gotten a PSD permit before construction and should have installed pollution controls. EPA told Detroit Edison that it had violated the Clean Air Act by starting construction without doing those things, and warned that its PSD violations "would be compounded" if the company restarted its overhauled unit before correcting its errors. Dkt. #8, Ex.2E (Notice of Violation).

EPA tried to resolve its disagreement with Detroit Edison without litigation. Among other things, EPA explained why Unit #2 construction project was, in fact, a PSD-triggering "modification." EPA noted that Detroit Edison's own letter had admitted that the project would increase Unit #2's emissions far beyond the thresholds that trigger PSD permitting requirements. EPA then stated that the company could not categorize the project as "routine maintenance." Nor could Detroit Edison write off its own predictions of a pollution increase by denying that the increase would have anything to do with the overhaul. EPA thus explained that the Unit #2 project was legally a "modification" that triggered PSD requirements and ended Unit #2's grandfathered status.

If Detroit Edison had applied for a PSD permit and installed the necessary pollution controls at Unit #2, it would have reduced the plant's sulfur dioxide emissions by 95% or more, and its nitrogen oxide emissions by 90% or more. Dkt. #8, Ex.1 at 4 (Chinkin Decl). This large percentage reduction would have been enormous in absolute terms—installing emissions controls at Unit #2 would yield roughly the same pollution reductions as shutting down any one of Detroit Edison's other Michigan power plants *entirely*. *Id.* at 26.

Detroit Edison rejected EPA's analysis and re-started Unit #2 on June 6, 2010. The company told EPA that its business plan called for installing pollution controls on Unit #2 in 2014 and that it would not install them earlier to satisfy PSD requirements. That delay would save the company a great deal of money, but it would cost the public. Dr. Joel Schwartz—Harvard public health professor and the most-cited author in the field of air pollution research—estimated that if Detroit Edison were to install the required modern controls, it "would result in 90 fewer deaths per year" and provide societal benefits "worth approximately \$542 million per annum." Dkt. #8, Ex.12 at ¶ 8 (Schwartz Decl.) (emphasis added).

## C. <u>Procedural History</u>

The United States filed its complaint against Detroit Edison on August 5, 2010 and moved for a preliminary injunction the next day. Dkt. #1&8. We requested an order that would require Detroit Edison not only to start installing pollution controls at the newly-overhauled Unit #2, but also to take steps in the meantime to temporarily compensate for the fact that the newly-overhauled Unit #2 is still discharging pollutants as if it were grandfathered—that is, at levels ten times higher than the Clean Air Act allows.

## 1. <u>Detroit Edison Opposes An Injunction, Reasserting Its Two Legal</u> <u>Defenses To PSD Applicability.</u>

Detroit Edison opposed any injunctive relief. It offered instead to limit its operation of Unit #2 in order to maintain emissions at the preconstruction baseline—that is, to pollute at no more than grandfathered levels. But it refused to reduce emissions from Unit #2 at all, let alone by 90% to mimic the effect of modern pollution controls. Instead, it reiterated the conclusory legal assertions in its notice letter: Detroit Edison claimed once again (1) that its \$65 million project was routine maintenance, and (2) that the emissions increases it had projected would be caused by things other than the overhaul.

The court denied the United States' request for a preliminary injunction without an opinion. Dkt. #78. It decided instead to expedite merits resolution.

## 2. <u>Detroit Edison Argues For The First Time That Its Pre-</u> Construction Letter Blocked EPA's Suit.

Detroit Edison moved for summary judgment on June 9, 2011.

Dkt. #107. In that motion, Detroit Edison advanced a new legal theory: that it had blocked EPA's suit by satisfying the recordkeeping requirements of 40 C.F.R. § 52.21(r)(6). The company had not mentioned this theory before: not in the notice letter, not during enforcement negotiations, and not in the preliminary injunction proceedings. It frankly admitted that it was novel.

Although the preamble to the 2002 NSR Reform Rules said that EPA was making only "minor changes" to the PSD regime for power plants, 67 Fed. Reg. at 80,192, Detroit Edison claimed that EPA had encoded a radical transformation within the Rule's updated recordkeeping provisions. One way in which EPA had previously enforced PSD requirements was by using its own emissions projections to show that a given project would cause an emissions increase. Detroit Edison said that the 2002 Rules "changed all that." Dkt. #107 at 1.

According to Detroit Edison, 40 C.F.R. § 52.21(r)(6) now allows an operator to "choose to make and record a projection of post-change emissions" before starting a construction project. Dkt. #107 at 6 (emphasis added and internal quotation marks omitted). If the operator "chooses" to make an emissions projection and determines for itself that construction will not cause an emissions increase, then it need not apply for a PSD permit or install pollution controls. Moreover, said Detroit Edison, if an operator records a pre-construction analysis, EPA cannot use its own emissions projections to show that PSD requirements do apply—even if the operator's own analysis was unreasonable or fraudulent. Dkt. #107 at 12. (Detroit Edison did not explain what would happen if an operator chooses not to make or record a projection.)

Detroit Edison claimed that its last-minute letter had satisfied 40 C.F.R. § 52.21(r)(6). As a result, Detroit Edison said, EPA could not contest the company's pre-construction analysis, including the company's legal assertion that the emissions increases it had projected would not be caused by the overhaul project at Unit #2. Nor could EPA introduce its own emissions analysis to show that the Unit #2 overhaul had triggered PSD requirements. Instead, Detroit Edison argued that

EPA could only enforce the law by using *monitoring data* to show that the Unit #2 overhaul had caused a significant emissions increase.

Detroit Edison claimed that under EPA's 2002 rules "it is this post-project data—not the pre-project projection—that determines whether NSR has been triggered." Dkt. #107 at 12. And until the company collected at least a year's worth of data, EPA could do nothing at all.

Detroit Edison's own motion exposed the peril of such an approach. The Unit #2 overhaul could add up to twenty years to its life. But the company frankly admitted that *any* power plant can temporarily be "managed consistent with" an emissions projection so that it generates emissions "that conform to the projection." Dkt. 107 at 6. (Part I.C describes in more detail how Detroit Edison can do that.) In other words, Detroit Edison admitted that by temporarily "managing" its operation of Unit #2, it could keep the overhauled plant's annual emissions from increasing during the five-year monitoring period specified in 40 C.F.R. § 52.21(r)(6)(iii). Using that approach, Detroit Edison could effectively thwart later PSD scrutiny.

The United States opposed Detroit Edison's theory. Dkt. #114. We argued that nothing in the 2002 Rules prevents EPA from stepping in

at any time to enforce PSD requirements if the agency's own emissions projections show that unpermitted construction would result in a significant emissions increase. We explained that EPA had promulgated the new recordkeeping requirements in 40 C.F.R. § 52.21(r)(6) to facilitate, not eliminate, its review of operators' pre-construction analyses. The regulations do not create any "safe harbor" that protects a faulty emissions analysis from scrutiny merely because an operator recorded the analysis to satisfy recordkeeping requirements.

We also reminded the court that Detroit Edison *had* projected a very large increase in its sulfur dioxide and nitrogen oxide emissions. The only bases it had asserted for avoiding PSD requirements were legal in nature. The district court could decide those legal issues immediately—there was no reason to wait for actual emissions data to resolve them.

Finally, we emphasized that if there were any doubt about the issue, EPA's interpretation of its regulations controlled unless plainly erroneous or inconsistent with the regulatory text. Dkt. #114 at 12.

3. <u>Judge Friedman Adopts Detroit Edison's Interpretation Of 40</u> C.F.R. § 52.21 Instead Of EPA's Interpretation.

On August 23, 2011, Judge Friedman adopted Detroit Edison's reading of 40 C.F.R. § 52.21(r)(6) wholesale and granted summary judgment against the United States. Without hearing argument, Judge Friedman dismissed EPA's position as "focus[ed] largely on the text of the CAA [Clean Air Act]." Dkt. #160 at 9. He explained:

[EPA] does not recognize the function of the 2002 NSR rules . . . which lessens the pre-construction burden on existing facilities so long as certain requirements are met. The 2002 NSR rules provide source operators such as Defendants with the option of either getting a permit before commencing their projects, or measuring their emissions afterward and running the risk of the Government bringing an enforcement action.

Id. According to Judge Friedman, Detroit Edison had blocked EPA's lawsuit by recording and submitting its pre-construction analysis. In fact, EPA could not pursue any enforcement action against Detroit Edison until and unless the company submitted monitoring data showing an emissions increase—which would be at least a year after the company restarted Unit #2. Dkt. #160 at 10. Judge Friedman never responded to EPA's deference arguments.

#### STANDARD OF REVIEW

This court reviews a district court's grant of summary judgment de novo. Burchett v. Kiefer, 310 F.3d 937, 941 (6th Cir. 2002). When examining a regulation promulgated by an agency, the Court defers to the agency's interpretation unless it is "plainly erroneous or inconsistent with" the regulation. Auer v. Robbins, 519 U.S. 452, 461 (1997).

#### SUMMARY OF ARGUMENT

The district court erroneously held that Detroit Edison blocked EPA's enforcement action by complying with the recordkeeping requirements of 40 C.F.R. § 52.21(r)(6). By holding that the regulation gives Detroit Edison a safe harbor from any challenge to its erroneous PSD analysis, the court ignored (1) the structure of the Clean Air Act's enforcement provisions, (2) the text and history of 40 C.F.R. § 52.21(r)(6) itself, and (3) Supreme Court rulings that require courts to accept an agency's interpretation of its own regulations unless it is "plainly inconsistent" with the regulatory text. If affirmed, the ruling would not only let Detroit Edison keep Unit #2 "grandfathered" for as long as it chooses, but potentially eviscerate Clean Air Act enforcement in the Sixth Circuit.

- 1. The PSD program mandates pre-construction review and permitting of construction and modification projects. The Act allows EPA to enforce those pre-construction requirements in advance by analyzing whether a planned construction project triggers PSD requirements and by enjoining construction before it even begins. If a plant operator like Detroit Edison manages to finish construction before EPA files suit, EPA can still enforce PSD requirements using the same approach. The agency can use its own emissions projections to demonstrate that a proper pre-construction analysis would have shown an emissions increase. By doing so, it can require the operator to comply with PSD requirements, including the requirement to install pollution controls.
- 2. 40 C.F.R. § 52.21(r)(6) is a recordkeeping requirement that supports—not eliminates—enforcement based on emissions projections. Nothing in its text suggests that an operator can preclude such enforcement just by recording its own emissions analysis before starting a project. The history and structure of the regulation show that it is an update to an older recordkeeping provision and nothing more. And if

this Court has any doubts about how to read it, EPA's interpretation controls.

Here, Detroit Edison's own pre-construction analysis projected a massive pollution increase. The company advanced purely legal theories for ignoring that increase in its PSD analysis. The Clean Air Act authorizes the United States to challenge Detroit Edison's legal theories before, during—and now after—construction is complete.

#### ARGUMENT

I. EPA CAN ENFORCE PSD REQUIREMENTS AT UNIT #2
BASED ON ITS OWN ANALYSIS OF FUTURE EMISSIONS.

The Clean Air Act's PSD requirements impose pre-construction obligations on an operator if a planned project would cause an emissions increase. The Act allows EPA to enforce those obligations *before or after* construction by using its own emissions projections. EPA can use its projections to demonstrate that the operator should have projected a PSD-triggering emissions increase. The district court's interpretation of 40 C.F.R. § 52.21(r)(6) doesn't just ignore this statutory structure. It negates it.

# A. EPA Must Be Able To Enforce The Act Before Construction By Using Emissions Projections.

The title of the Clean Air Act's core PSD provision—Section 165 emphasizes that the program imposes "Preconstruction requirements." 42 U.S.C. § 7475; see New York v. EPA, 413 F.3d 3, 12 (D.C. Cir. 2005) (Section 165 "expressly creat[es] a preconstruction review process for new or modified major sources"). Its first sentence immediately reiterates that PSD permitting requirements accrue before construction: "No major emitting facility . . . may be constructed for modified in any area to which this part applies" unless the operator satisfies PSD requirements. 42 U.S.C. § 7475(a) (emphasis added). Even more specifically, Congress said that an operator cannot start modifying its facility unless "a permit has been issued" and unless "the proposed facility is subject to the best available control technology." *Id*. § 7475(a)(1), (a)(2), (a)(4) (emphasis added); 40 C.F.R. § 52.21(r)(1); Environmental Defense v. Duke Energy Corp., 549 U.S. 561, 568 (2007); Alaska Dep't of Envtl. Conservation v. EPA, 540 U.S. 461, 490 (2004).

In order to determine whether a "proposed" project would increase emissions and thereby trigger these pre-construction obligations, an operator must make "a pollutant-by-pollutant projection of the emissions increases." 57 Fed. Reg. 32,314, 32,316 (July 21, 1992). It has to perform that analysis "in advance of construction." *Id.* at 32,316 (1992); *see also* 40 C.F.R. § 52.21(a)(2)(iv)(b) (specifying "[t]he procedure[s] [to be used] for calculating before beginning actual construction" if an emissions increase will occur) (parentheses omitted). Detroit Edison has called this an "unexceptional proposition." Dkt. #119 at 8 (Reply Memorandum).

EPA "cannot reasonably rely on a utility's own unenforceable estimate of its annual emissions." Wis. Elec. Power Co., 893 F.2d at 917; New York, 413 F.3d at 35 (operator can "understat[e] projections for emissions associated with malfunctions, for example, or overstat[e] the demand growth exclusion"). Congress therefore authorized EPA to assess for itself whether a project would trigger PSD requirements and to enforce those requirements before construction begins. Section 167, the Act's PSD enforcement provision, shows this very clearly. That provision says that EPA shall "take such measures, including issuance of an order, or seeking injunctive relief, as necessary to prevent the construction or modification of a major emitting facility which does not conform to the requirements of this part." 42 U.S.C. § 7477 (emphasis

added; see also 42 U.S.C. § 7604(a)(3) (allowing "any person" to sue a source that "proposes to construct" a new or modified source without an NSR permit) (emphasis added); United States v. Xcel Energy, 759 F. Supp. 2d. 1106, 1113 (D. Minn. 2010) (Section 167 gives EPA "authority to investigate, and then to prevent through appropriate legal remedies, violations committed before construction commences").

In order to prevent unlawful construction before it begins, EPA must be able to use its own emissions projections to show that PSD requirements apply. If the operator's pre-construction analysis were dispositive, the operator could understate future emissions in order to start construction of a "major modification" that correct projections show "would result in" a triggering emission increase without first getting a PSD permit and without installing pollution controls. 40 C.F.R. § 52.21(b)(2)(i). Again, that would contradict Congress' instruction that construction should not begin unless "a permit has been issued" and unless "the proposed facility is subject to the best available control technology." 42 U.S.C. § 7475(a)(1),(4). But that is precisely what Detroit Edison did.

## B. <u>EPA Can Enforce PSD Requirements Based On</u> <u>Emissions Projections Even After Construction.</u>

In some cases, EPA identifies a PSD-triggering project in advance, and can block construction before it begins. See, e.g., Alaska Dept. of Envtl. Cons. v. EPA, 540 U.S. 461 (2004). But in others, EPA uncovers evidence of a "modification" after construction is already under way, or after it is finished. In those cases, EPA can still enforce PSD requirements by demonstrating that the operator should have projected that emissions would increase, and therefore should have gotten a permit. The agency explains it this way:

Because the statute and regulations contemplate that the regulated entity must predict future events in order to determine whether a permit is required, it is appropriate to base a finding of violation (for *failure to obtain* the permit) upon what the entity *reasonably could have predicted* prior to beginning construction.

In re Tenn. Valley Auth., 9 E.A.D. 357, 2000 WL 1358648, (EAB Sept. 15, 2000), rev'd on other grounds, Tenn. Valley Auth. v. Whitman, 336 F.3d 1236 (11th Cir. 2003). Every court to examine the issue has agreed that EPA can enforce PSD requirements using its own emissions projections even after an operator finishes construction. The lead case, a district court decision known as SIGECO, affirms that "whether [a finished project] required a preconstruction permit must be determined

by reviewing evidence of the *projected* post-project emissions increases." United States v. S. Ind. Gas & Elec., 2002 WL 1629817 at \*2-\*3 (S.D. Ind. 2002) (emphasis added); see also United States v. Ohio Edison, 276 F. Supp. 2d 829, 881 (S.D. Ohio 2003) (relying on SIGECO to examine emissions projections in a post-construction case); United States v. Duke Energy Corp., 2010 WL 3023517 at \*5 (M.D.N.C. 2010) (same). United States v. Cinergy Corp., 384 F. Supp. 2d 1272, 1276 (S.D. Ind. 2005) (reaffirming SIGECO) (rev'd on other grounds).8

This approach harmonizes pre-construction and post-construction PSD enforcement. Whether EPA is examining a proposed project or one that is already finished, the agency can enforce PSD requirements by showing that a proper emissions projection would have identified a triggering emissions increase. This legal standard remains applicable whether a project is evaluated before, during, or after construction. This consistency avoids giving operators any incentive to make unreasonably

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<sup>&</sup>lt;sup>8</sup> Though most of these decisions came after the 2002 NSR Reform Rules, they involved violations that occurred before those rules were in effect. *See United States v. Cinergy Corp*, 458 F.3d at 708 (noting that any difference between the 1992 and 2002 rules "would not affect our analysis").

low emissions projections, or worse, to avoid making emissions projections at all.

# C. <u>EPA Can Also Enforce The Act Based On Post-</u> <u>Construction Monitoring Data, But Neither The Act</u> <u>Nor Regulations Limit EPA To That Approach.</u>

If an operator finishes a construction project without first obtaining a PSD permit, EPA has another way of proving that the project was a PSD-triggering modification. After explaining how an operator goes about making emissions projections "before beginning actual construction," 40 C.F.R. § 52.21(a)(2)(iv)(b) says:

Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

This regulation gives EPA another way to enforce PSD requirements besides introducing its own emissions projections. If an operator finishes a "modification" without getting a permit or installing pollution controls, EPA can use post-construction monitoring data to prove that the project *actually did* cause an emissions increase.

It is important to recognize that enforcement based on postconstruction monitoring data *supplements* enforcement based on emissions projections. By preventing EPA from using its own emissions projections to contest Detroit Edison's PSD analysis, the district court effectively held the opposite: that EPA can *only* enforce PSD requirements at Unit #2 using post-construction monitoring data. This approach would defeat the Act's purposes and ignore practical reality.

As a legal matter, requiring EPA to enforce PSD requirements based on monitoring data alone would prevent the agency from enjoining offending projects before construction. Before construction, there is no monitoring data for EPA to examine. Holding that EPA can only use monitoring data to contest an operator's pre-construction PSD analysis would thus effectively repeal the Clean Air Act's statutory enforcement provision: EPA cannot "prevent the construction or modification of a major emitting facility which does not conform to [PSD requirements]" if it cannot use its own emissions projections to show that the requirements apply. 42 U.S.C. § 7477.

As a practical matter, eliminating enforcement based on emissions projections might prevent EPA from *ever* enforcing PSD requirements at Unit #2. This is because a power plant's actual emissions depend not just on its physical design but also on its operating time and how close to full capacity it runs. A plant that runs full time at full capacity will generate more emissions than a plant that operates less. And Detroit

Edison admitted during discovery that it manages its operation of Unit #2 to *limit* the unit's actual emissions during the monitoring period specified by 40 C.F.R. § 52.21(r)(6)(iii). The company does this by collecting a surcharge on the power Unit #2 generates—a surcharge that it tellingly calls an "NSR adder." See Dkt. #114 Ex.11 at 63-65 (under seal) (Response to Summary Judgment Motion). That NSR adder incrementally reduces demand from Unit #2 by artificially increasing the price for its energy. That, in turn, artificially decreases the unit's runtime and pollutant emissions. Id. Detroit Edison uses sophisticated computer models to compute NSR adders for Unit #2 to temporarily micro-manage its post-construction emissions so as to evade PSD requirements. Id. And it candidly admits that any power plant can temporarily be "managed consistent with" a pre-construction emissions projection to produce "future emissions that conform to the projection," thus minimizing PSD scrutiny. Dkt. 107 at 6 (Summary Judgment Motion). So Detroit Edison concedes that the district court's decision could allow it to restrict its operation of Unit #2 to escape scrutiny during the five-year monitoring period, and then to operate Unit #2 at full potential once the monitoring period ends.

Detroit Edison's concession explains why projection-based enforcement remains important even after construction is complete. Because an operator can easily generate monitoring data that conform to flawed pre-construction projections, "the fact that there was no postproject increase in actual emissions . . . does not, as a matter of law. exempt [an operator] from the Act's preconstruction permit requirement." SIGECO at \*3. Focusing solely on monitoring data would allow operators to take a "wait-and-see" approach to PSD applicability that "would undermine both the language and purpose of the Clean Air Act." United States v. Ohio Edison, 276 F. Supp. 2d 829, 882, 884-885 (S.D. Ohio 2003) ("actual emissions data, while interesting, is not dispositive of the matter to be resolved ... It is the projected net emissions increase that the Defendant could have predicted prior to the projects being undertaken that determines whether there is a CAA violation"); National Parks Conservation Ass'n v. TVA, 618 F. Supp. 2d 815, 829 (E.D. Tenn. 2009) ("Considering 'actual' post-project data would be inconsistent with the purposes of the CAA . . . . "). Preventing EPA from using emissions projections to enforce PSD requirements could effectively allow operators to keep older plants like Unit #2

grandfathered forever. *Cf. Wis. Elec. Power Co.*, 893 F.2d at 909 (rejecting interpretation of "modification" that "would open vistas of indefinite immunity" from PSD provisions).

## II. 40 C.F.R. § 52.21(R)(6) FACILITATES—NOT ELIMINATES— ENFORCEMENT BASED ON EMISSIONS PROJECTIONS.

Detroit Edison argued—and Judge Friedman held—that EPA transformed PSD enforcement when it promulgated the 2002 NSR Reform Rules. Specifically, the district court held that if an operator satisfies 40 C.F.R. § 52.21(r)(6) by recording an emissions projection before construction, it enters a "safe harbor" in which EPA can no longer use its own emissions projections to enforce PSD requirements—before or after construction. See Dkt. #160 at 7 (an operator who complies with § 52.21(r)(6) "may commence construction without an NSR permit in full compliance with the CAA") (emphasis added).

The district court's ruling is wrong. It ignores not only the history, text, and structure of 40 C.F.R. § 52.21(r)(6), but also bedrock principles of judicial deference. And by effectively preventing EPA from using its own emissions projections to enforce PSD requirements, the decision would all but eviscerate the PSD program.

# A. 40 C.F.R. § 52.21(r)(6) Can Only Be Read To Facilitate Enforcement Based On Emissions Projections.

The text and structure of 40 C.F.R. § 52.21(r)(6) show that it facilitates PSD enforcement actions that are based on emissions projections; nothing in its text requires EPA to enforce PSD requirements using monitoring data alone. There is literally nothing in the rule to suggest that an operator gains *any* legal advantage from complying with recordkeeping requirements, let alone a safe harbor from PSD enforcement. In fact, when it promulgated the 2002 NSR Reform Rules, EPA said just the opposite: "There are *no provisions* in the final rules to protect from civil or criminal penalties the owner or operator of a source that constructs a 'major modification' without obtaining a major NSR permit." EPA Technical Support Document (Nov. 2002) at I-4-26.9

The structure of 40 C.F.R. § 52.21(r)(6) only makes sense if its recordkeeping requirements facilitate PSD enforcement based on emissions projections. It would be absurd to conclude that an operator

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<sup>&</sup>lt;sup>9</sup> The full title of this document is "U.S. EPA, Technical Support Document for the Prevention of Significant Deterioration and Nonattainment Area New Source Review Regulations" and it is available at http://www.epa.gov/NSR/documents/nsr-tsd\_11-22-02.pdf.

who follows them can take emissions projections off the table and force EPA to police PSD requirements using monitoring data alone. Below are just a few examples of the potential absurdities; we do not present these to suggest what Detroit Edison plans to do, but to illustrate how illogical its position is.

1. <u>40 C.F.R. § 52.21(r)(6)(iii) imposes limited monitoring</u> requirements that Detroit Edison claims it need not follow.

The district court held that the 2002 Rules fundamentally revised EPA's approach to PSD enforcement. As the court understood things, once an operator projects for itself that a construction project will not trigger PSD requirements, and records that conclusion pursuant to 40 C.F.R. § 52.21(r)(6)(i), EPA can only contest the operator's analysis using monitoring data that the operator collects pursuant to 40 C.F.R. § 52.21(r)(6)(iii). As Detroit Edison put it, "it is this post-project data—not the pre-project projection—that determines whether [PSD] has been triggered." Dkt. #107 at 12 (Summary Judgment Motion).

The text of 40 C.F.R. § 52.21(r)(6) shows that the 2002 Rules cannot possibly have made post-project monitoring data the sole determinant of PSD applicability. That is because the data monitoring requirement in the new Rules—40 C.F.R. § 52.21(r)(6)(iii)—does not

even apply to all sources. Like the rest of 40 C.F.R. § 52.21(r)(6), it only applies when operator forecasts a "reasonable possibility" of an emissions increase. If EPA could only enforce PSD requirements using monitoring data, operators would have a strong incentive to make preconstruction projections that show no possibility of an emissions increase, and thereby avoid collecting any data. See New York, 413 F.3d at 35 (operator could conclude that "a significant emissions increase was not reasonably possible" by "understating projections for emissions associated with malfunctions, for example, or overstating the demand growth exclusion"). If Detroit Edison were right that the 2002 rules require EPA to enforce PSD requirements based on monitoring data alone, Dkt. #119 at 4, then it would be absurd for those rules to have imposed such a limited data monitoring requirement.

This court need not look far to find a real-world example of such an absurdity. Even as Detroit Edison argues that EPA can only enforce PSD requirements at Unit #2 by using monitoring data, the company simultaneously claims that it *does not have to collect data* pursuant to 40 C.F.R. § 52.21(r)(6)(iii). Recall that Detroit Edison asserted in its notice letter that

[T]here is no reasonable possibility that the proposed project will result in a significant emissions increase and thus, *the* requirements [of 40 C.F.R. § 52.21(r)(6)] do not apply.

Dkt. #8, Ex.2C at 1 (emphasis added). In other words, Detroit Edison claims that the results of pre-construction analysis mean that it need not follow *any* of the requirements of 40 C.F.R. § 52.21(r)(6) at Unit #2—including the data monitoring requirement in paragraph (iii). So if this court were to affirm, EPA could not use emissions projections to enforce PSD requirements at Unit #2, and Detroit Edison could decline to collect monitoring data pursuant to 40 C.F.R. § 52.21(r)(6)(iii). On Detroit Edison's account, the regulation would not even require it to collect the very data that it thinks are the only "measuring stick" for PSD applicability. Dkt. #119 at 4 (Reply Memorandum).

All this absurdity disappears once one recognizes that EPA can enforce PSD requirements using emissions projections before and after construction is complete. Because 40 C.F.R. § 52.21(r)(6) facilitates—not eliminates—such enforcement, its limited monitoring requirements are unproblematic. Operators cannot frustrate PSD enforcement just by concluding that there is no "reasonable possibility" of an emissions increase and thereby deciding not to collect monitoring data. Because

EPA can always enforce PSD requirements using its own emissions projections to challenge an operator's pre-construction analysis, a lack of monitoring data would not prevent PSD enforcement.

2. <u>Any safe harbor from projection-based enforcement would not</u> extend to protect Detroit Edison.

40 C.F.R. § 52.21(r)(6) only applies to operators who predict that project-related emissions will be close to—but not over—the threshold for triggering PSD requirements. This points to another absurdity in the district court's decision: because Detroit Edison claimed that its overhaul would not cause *any* emissions increase, 40 C.F.R. § 52.21(r)(6) did not apply at all and could not provide Detroit Edison the safe harbor the district court imagined.

Recall yet again that 40 C.F.R. § 52.21(r)(6) only applies when an operator's projections show a "reasonable possibility" of an emissions increase. And that Detroit Edison said there was "no reasonable possibility" of an emissions increase at Unit #2. Dkt. #8, Ex.2C at 1 (March 12, 2010 Letter). Taking Detroit Edison at its word, its own assertion blocked the company from sheltering in any safe harbor encoded in 40 C.F.R. § 52.21(r)(6). This is absurd—no sensible safe harbor provision would protect operators who are close to PSD

thresholds while denying any benefit to operators who claim they are nowhere near the thresholds.

But yet again the absurdity disappears once one recognizes that EPA can enforce PSD requirements using emissions projections at any time. Because EPA can always do so, Detroit Edison did not deprive itself of any safe harbor by asserting that 40 C.F.R. § 52.21(r)(6) does not apply to its Unit #2 project. There was never any safe harbor to begin with.

### 3. Detroit Edison recorded its projection for no reason.

The district court agreed with EPA that 40 C.F.R. § 52.21(r)(6)(i) requires certain operators to keep records of their pre-construction PSD analyses. See, e.g., Dkt. #160 at 5. But by ruling that EPA cannot contest those analyses using its own emissions projections, the district court turned the recordkeeping requirement into a hollow formality. If EPA could only enforce PSD requirements when "post-construction monitoring detects an increase in emissions of regulated pollutants," id. at 9 (emphasis added), then there would be virtually no reason for Detroit Edison to keep records of its pre-construction emissions analyses, let alone mail them to regulators.

Again, the absurdity disappears once one recognizes that EPA can use its own emissions projections to enforce PSD requirements at any time. 40 C.F.R. § 52.21(r)(6) exists to facilitate such EPA enforcement, and one way it does so is by requiring operators to keep records of their own projections.

# B. The History Of The 2002 Reform Rules Confirms That 40 C.F.R. § 52.21(r)(6) Is Only A Recordkeeping Requirement.

The history of the 2002 NSR Reform Rules confirms that Section 52.21(r)(6) is a recordkeeping regulation and nothing more. EPA promulgated it to update a recordkeeping regulation that the agency first created nearly twenty years ago. Holding that EPA revolutionized PSD enforcement in the new regulation would be to say that EPA hid an elephant in a mousehole. *Cf. Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 468 (2001).

# 1. <u>The WEPCo Rules And "WEPCo Backstop"</u>

EPA has issued several rules to tell power plant operators how to predict whether a planned project would increase emissions and therefore require PSD permitting and installation of pollution controls. Before 1992, EPA specified a simple approach: power plant operators had to compare the plant's *actual* pre-construction emissions to its

maximum potential post-construction emissions. EPA called this the "actual-to-potential" test. See 40 C.F.R. § 52.21(b)(21)(iv) (1988); see generally Puerto Rican Cement Co. v. EPA, 889 F.2d 292, 296-297 (1st Cir 1989). Determining a power plant's "maximum potential" emissions was a theoretical matter since virtually no plants operate at their maximum potential. Under this regime, EPA did not specifically require plants to monitor post-construction emissions—monitoring data usually did little to confirm the accuracy of the pre-construction analysis.

The Seventh Circuit severely limited the "actual-to-potential" test for power plants in a case called "WEPCo." Wis. Elec. Power Co. v. Reilly, 893 F.2d 901 (7th Cir. 1990). WEPCo held that the test was improperly stringent for power plants. In response, EPA promulgated new rules—informally called the "WEPCo Rules"—that allowed power plant operators to use a more forgiving test. Under it, power plant operators could compare their actual pre-construction emissions to predicted post-construction emissions. EPA therefore called the new test the "actual-to-projected-actual" test. 57 Fed. Reg. 32,314, 32,317, 32,325 (July 21, 1992); see also New York, 413 F.3d at 16 (discussing history).

But EPA still allowed power plant operators to use the less-forgiving (but more straightforward) "actual-to-potential" test if they preferred.

In shifting from the actual-to-potential test to the actual-to-projected actual test, EPA understandably worried that power plant operators might "under-project" their future emissions and thereby evade PSD requirements. 57 Fed. Reg. at 32,325. So in the WEPCo Rules, EPA also required any power plant operator who chose the new test to collect post-construction emissions data and submit records of annual emissions up to ten years after the project. *Id.* EPA called this recordkeeping provision the "WEPCo Backstop." Because only power plants could use the actual-to-projected actual test, the "WEPCo backstop" only applied to power plants.

2. 40 C.F.R. § 52.21(r)(6) Merely Updates The WEPCo Backstop.

EPA promulgated the NSR Reform Rules in 2002. EPA's main objective in promulgating the Rules was to allow sources other than power plants to use the "actual-to-projected-actual" test that power plants had already been using under the WEPCo rules. The vast bulk of the 2002 rule package is devoted to that issue. New York, 413 F.3d at 16 (citing 67 Fed. Reg. 80,186, 80,275 (Dec. 31, 2002)).

As part of its harmonization effort, EPA also updated the monitoring and recordkeeping requirements in the *WEPCo* backstop by promulgating 40 C.F.R. § 52.21(r)(6). EPA described the updated *WEPCo* backstop regulations as just what they were—tracking and reporting requirements:

The main purpose of the annual tracking requirements is to maintain adequate information to ascertain whether the source's initial estimate of post-change actual emissions is accurate, but such a tracking requirement should also promote careful and accurate projections so that sources will not have to face the risk of retroactive NSR applicability and possible enforcement actions.

EPA Technical Support Document at I-4-18; see also id. at 4-41 to 4-42 (recordkeeping helps "[t]o ensure a level playing field between sources that may approach the pre-construction projection of post-change emissions with different degrees of conscientiousness"). This language also shows that 40 C.F.R. § 52.21(r)(6) is merely an outgrowth of its predecessor by mirroring the language EPA had previously used to explain the WEPCo backstop: back in 1992, EPA described the backstop as a way to "confirm . . . initial projections." 57 Fed. Reg. at 32,325.

When EPA promulgated the 2002 NSR Reform Rules, it pointed out the obvious: while the rules would make significant changes for

most kinds of sources, it would be business as usual for power plants. The new rule allowed sources besides power plants to use the actual-to-projected actual test, but power plants had *already* been allowed to use it. The new rule required all sources to keep records of their projections and monitoring data, but power plants *already* had to do so. As a result, EPA said that the 2002 NSR Reform Rules would make only "minor changes to the existing procedures for [electric utilities]." 67 Fed. Reg. at 80,192. EPA said nothing to suggest that the rule would eliminate the agency's ability to enforce PSD requirements using emissions projections.

3. <u>Detroit Edison's Trade Association Said That The 2002 NSR</u> <u>Reform Rules Do Not Limit EPA's Enforcement Authority.</u>

Detroit Edison publicly agreed with EPA's assessment of the 2002 NSR Reform Rules. When environmental groups complained that the new rules would compromise EPA's enforcement efforts, the Utility Air Regulatory Group—Detroit Edison's trade association—asserted that PSD enforcement would continue to work the same way it had before.

The environmental groups filed suit in the D.C. Circuit to challenge several aspects of the new rules. One of their complaints concerned the new recordkeeping provisions in 40 C.F.R. § 52.21(r)(6).

The environmental groups questioned EPA's decision to exempt projects that had "no reasonable possibility" of causing emissions increase from the WEPCo backstop reporting requirements. Joint Brief of Industry Intervenors, New York v. EPA, No. 02-1387, available at 2004 WL 5846442, at \*18-\*19 (Oct. 26, 2004). The Utility Air Regulatory Group intervened to defend the new exemption to the WEPCo backstop.

In defending the new 40 C.F.R. § 52.21(r)(6), the utilities group noted first that very little had actually changed for power plants; among other things, they said that the actual-to-projected-actual test was "virtually identical to" the rules they had been using under the 1992 WEPCo rules. *Id.* at \*16. The utilities group *never* suggested that the 2002 NSR Reform Rules eliminated PSD enforcement based on emissions projections. To the contrary, the group told the D.C. Circuit that "[t]he final [2002] rules *do not change* the extensive enforcement tools and opportunities available to EPA and states" and that the new rules gave EPA "the same or better enforcement capability as compared to the past." *Id.* at \*16,\*19. These statements are completely inconsistent with Detroit Edison's current views. *See generally* Dkt.

#114, Ex.10 at 24-26 (deposition transcript describing relationship between Detroit Edison and its trade association)

# C. This Court Must Defer To EPA's Interpretation Of Its Own Regulation Unless "Plainly Erroneous."

The text, structure, and history of 40 C.F.R. § 52.21(r)(6) prove that it is a recordkeeping requirement designed to facilitate enforcement of PSD requirements at any time. But even if this Court were to find the district court's contrary reading plausible—indeed, even if this Court thinks the district court's reading is *more reasonable* than EPA's, it would still have to reverse.

## 1. The District Court Never Applied Deference Principles.

This court can only reject EPA's interpretation of 40 C.F.R. § 52.21(r)(6) if the agency's views are "plainly erroneous or inconsistent with the regulation." *Auer v. Robbins*, 519 U.S. 452, 461 (1997) (internal quotation marks and citations omitted). Otherwise, the law requires this court to defer. *Stinson v. United States*, 508 U.S. 36, 45 (1993); *Talk America, Inc. v. Mich. Bell Tel. Co.*, 131 S. Ct. 2254, 2261, 2263 (2011) (deference extends to interpretations advanced in legal briefs).

This Court frequently emphasizes its obligation to defer to an agency's interpretation of its own regulations. And some of its strongest

language on this point has come in Clean Air Act cases. In Kentucky Resources Council, Inc. v. EPA, this Court adopted EPA's interpretation of another Clean Air Act regulation even after concluding that the agency's reading was "not necessarily the most natural in light of the provisions of [the regulation] as a whole"—indeed, after calling EPA's reading "somewhat strained." 467 F.3d 986 at 993-994 (6th Cir. 2006). Rather than imposing the more natural interpretation, the Court instead deferred to EPA, quoting the Supreme Court's instructions: "In construing administrative regulations, the ultimate criterion is the administrative interpretation, which becomes of controlling weight unless . . . plainly erroneous or inconsistent with the regulation." *Id*. (citation omitted). This Court quoted that same language again in Navistar International Transportation Corp. v. EPA, yet another case where it deferred to an EPA interpretation of a Clean Air Act regulations. 858 F.2d 282 (6th Cir. 1988); see also Kentucky Waterways Alliance v. Johnson, 540 F.3d 466 (6th Cir. 2008) (deferring to EPA interpretation of Clean Water Act regulation); Couer Alaska, Inc. v. Se. Alaska Conservation Council, 129 S. Ct. 2458, 2474 (2009).

The district court completely ignored this bedrock deference principle. It never even mentioned the "plainly erroneous or inconsistent" test in its opinion, let alone explained why EPA's interpretation of 40 C.F.R. § 52.21(r)(6) failed that test. The brevity with which the court dismissed EPA's views suggests that it may have been unaware that deference applied.

# 2. Neither of the two other regulatory provisions the district court relied upon support its decision.

The district court's inattention to deference principles may explain why it thought it could support its reading of 40 C.F.R. § 52.21(r)(6) with two isolated sentences from *another* regulation. Neither supports the district court's reading of 40 C.F.R. § 52.21(r)(6), let alone shows that EPA's views "clearly subvert" the language of that regulation. *Kentucky Resources Council*, 467 F.3d at 994.

The two sentences the district court relied upon come from within another PSD regulation: 40 C.F.R. § 52.21(a)(2). That provision, entitled "Applicability procedures," starts by reiterating that a source must get a permit before construction. *Id.* § 52.21(a)(2)(iii) (no operator "shall begin actual construction without a permit"). One subpart then states that post-construction emissions data showing an emissions increase can

trigger PSD requirements even if emissions projections do not. 40 C.F.R. § 52.21(a)(2)(iv)(b) says:

The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur . . . is contained in the definition in [40 C.F.R. § 52.21(b)(3)]. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

40 C.F.R. § 52.21(a)(2)(iv)(b).

The district court read the emphasized sentence to suggest that EPA can only enforce PSD requirements using post-construction monitoring data. But the sentence does not use the word "only," let alone reference the monitoring requirements in § 52.21(r)(6). Instead, it merely affirms what Part I.C. explained above: post-construction monitoring data create a supplementary basis for PSD enforcement. The regulation cannot be read to eliminate enforcement based on emissions projections. That reading would conflict with the Clean Air Act and various EPA regulations. The most obvious conflict would be with 42 U.S.C. § 7477; again, that statute authorizes EPA to enforce PSD requirements before construction begins, which EPA can only do by using emissions projections. 42 U.S.C. § 7477; Time Warner Entm't Co.,

L.P. v. Everest Midwest Licensee, L.L.C., 381 F.3d 1039, 1050 (10th Cir. 2004) ("a regulation must be interpreted in such a way as to not conflict with the objective of its organic statute"); Wolf Creek Collieries v. Robinson, 872 F.2d 1264, 1268 (6th Cir. 1989) (interpretations of regulations must be consistent with statutory language).

The district court also relied on another subparagraph of 40 C.F.R. § 52.21(a)(2): subparagraph (a)(2)(iv)(a). That subparagraph has three sentences, the second of which says: "The project is not a major modification if it does not cause a significant emissions increase." The court concluded that this sentence reinvented the PSD program by eliminating enforcement based on emissions projections. Again, that is impossible. If any EPA regulation did such a thing, that regulation would be invalid because it would conflict with 42 U.S.C. § 7477.

When read together with the two sentences that bookend it, the quoted sentence in Section 52.21(a)(2)(iv)(a) quickly turns innocuous. The first sentence of the subparagraph explains that PSD requirements apply when a planned project will cause both a significant emissions

increase and a significant *net* emissions increase.<sup>10</sup> The second sentence—the one the district court quoted—merely reiterates the first condition and makes clear that it is the first step of the two-step analysis. And the third sentence reiterates the second condition.

The regulations surrounding these three sentences show that they together describe a test that can be used to determine in advance whether PSD requirements apply to a planned project. Section 52.21(a)(2)(iv)(b), for instance, explains in detail how one determines whether a significant emissions increase or net increase "will occur." So EPA's decision to use present-tense language in Section 52.21(a)(2)(iv)(a) hardly shows that it meant to eliminate emissions projections as a basis for PSD liability. Putting so much weight on the verb tense of Section 52.21(a)(2)(iv)(a) would conflict with the provision's own assertion that it is "consistent with the definition of major modification contained in paragraph (b)(2) of [40 C.F.R. § 52.21]." That paragraph again uses the future tense to define a "major

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<sup>&</sup>lt;sup>10</sup> This language reflects the fact that under some circumstances operators can avoid triggering PSD requirements by subtracting qualifying emissions reductions at the source from any projected emissions increase to avoid a "net" emissions increase.

modification" as a physical change that "would result in" a significant net emissions increase. 40 C.F.R. § 52.21(b)(2)(i).

Finally, we reiterate that where there is any doubt about how to read either of these two sentences in 40 C.F.R. § 52.21(a)(2)(iv), EPA's interpretation of the language controls.

\* \* \*

In sum, the text and history of 40 C.F.R. § 52.21(r)(6) compel the conclusion that it is a recordkeeping requirement and nothing more. Nothing in the Clean Air Act or EPA regulations says or even implies that an operator can prevent EPA from using emissions projections to enforce PSD requirements merely by recording its own projections. Interpreting 40 C.F.R. § 52.21(r)(6) to create such a safe harbor would radically revise the PSD program. If there is any doubt about the matter, deference principles erase them.

Case: 11-2328 Document: 006111219654 Filed: 02/17/2012 Page: 62

#### CONCLUSION

This court should reverse the grant of summary judgment and remand for trial on the merits.

Respectfully submitted,

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# CERTIFICATE OF COMPLIANCE WITH TYPE VOLUME LIMITATION

This brief complies with the type-volume limitation of Fed. R. App. P. 32(a)(7)(B) because it contains 10,546 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii). The brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because I prepared it in a proportionally spaced typeface using the Microsoft Word 2007 word processing program in 14-point Century Schoolbook type.

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# RELEVANT DISTRICT COURT DOCUMENTS

Dkt. #1	Complaint
Dkt. #8	United States' Motion for Preliminary Injunction
Ex.2	Declaration of Lyle Chinkin Declaration of Ethan Chatfield (Includes Att. A-J) A: June 3, 2010 EPA Inspection Notes B: December 8, 2009 DTE Energy Press Release C: March 12, 2010 Letter from DTE to EPA D: April 22, 2010 "Monroe Evening News" Article E: June 4, 2010 Notice of Violation F: Excerpts of DTE Documents [UNDER SEAL]
	May 23, 2000 Letter from EPA to Detroit Edison
	Declaration of Robert H. Koppe Declaration of A. Michael Hekking
	Declaration of Dr. Joel Schwartz
Dkt. #23	DTE's Response To #8
Dkt. #78	Order Denying Motion For Preliminary Injunction
Dkt. #107	DTE's Motion For Summary Judgment
Dkt. #114	United States' Response To #107
Dkt. #119	DTE's Reply In Support Of #107
Dkt. #160	Memorandum Opinion And Order Granting #107

# STATUTORY AND REGULATORY ADDENDUM

<b>Provision</b>	Addendum / <u>CFR Page</u>
42 U.S.C. § 7411	i
42 U.S.C. § 7413	i-ii
42 U.S.C. § 7470	iii
42 U.S.C. § 7475	iv-v
42 U.S.C. § 7477	vi
42 U.S.C. § 7604	vi
40 CFR 52.21(a)(2)	14
40 CFR 52.21(b)(2)	16
40 CFR 52.21(b)(21)	21
40 CFR 52.21(b)(23)	21
40 CFR 52.21(r)(1)	38
40 CFR 52.21(r)(6)	38-40

# 42 U.S.C.A. § 7411 (a) Definitions

For purposes of this section:

(4) The term "**modification**" means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.

## 42 U.S.C.A. § 7413 Federal enforcement

## (a) (3) EPA enforcement of other requirements

Except for a requirement or prohibition enforceable under the preceding provisions of this subsection, whenever, on the basis of any information available to the Administrator, the Administrator finds that any person has violated, or is in violation of, any other requirement or prohibition of this subchapter, section 7603 of this title, subchapter IV-A, subchapter V, or subchapter VI of this chapter, including, but not limited to, a requirement or prohibition of any rule, plan, order, waiver, or permit promulgated, issued, or approved under those provisions or subchapters, or for the payment of any fee owed to the United States under this chapter (other than subchapter II of this chapter), the Administrator may--

- (A) issue an administrative penalty order in accordance with subsection (d) of this section,
- (B) issue an order requiring such person to comply with such requirement or prohibition,
- (C) bring a civil action in accordance with subsection (b) of this section or section 7605 of this title, or
- (D) request the Attorney General to commence a criminal action in accordance with subsection (c) of this section.

# (b) Civil judicial enforcement

The Administrator shall, as appropriate, in the case of any person that is the owner or operator of an affected source, a major emitting facility, or a major stationary source, and may, in the case of any other person,

commence a civil action for a permanent or temporary injunction, or to assess and recover a civil penalty of not more than \$25,000 per day for each violation, or both, in any of the following instances:

- (1) Whenever such person has violated, or is in violation of, any requirement or prohibition of an applicable implementation plan or permit. Such an action shall be commenced (A) during any period of federally assumed enforcement, or (B) more than 30 days following the date of the Administrator's notification under subsection (a)(1) of this section that such person has violated, or is in violation of, such requirement or prohibition.
- (2) Whenever such person has violated, or is in violation of, any other requirement or prohibition of this subchapter, section 7603 of this title, subchapter IV-A, subchapter V, or subchapter VI of this chapter, including, but not limited to, a requirement or prohibition of any rule, order, waiver or permit promulgated, issued, or approved under this chapter, or for the payment of any fee owed the United States under this chapter (other than subchapter II of this chapter).
- (3) Whenever such person attempts to construct or modify a major stationary source in any area with respect to which a finding under subsection (a)(5) of this section has been made.

[...]

# 42 USC § 7470. Congressional declaration of purpose

The purposes of this part are as follows:

- (1) to protect public health and welfare from any actual or potential adverse effect which in the Administrator's judgment may reasonably be anticipate [FN1] to occur from air pollution or from exposures to pollutants in other media, which pollutants originate as emissions to the ambient air) [FN2], notwithstanding attainment and maintenance of all national ambient air quality standards;
- (2) to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value;
- (3) to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources;
- (4) to assure that emissions from any source in any State will not interfere with any portion of the applicable implementation plan to prevent significant deterioration of air quality for any other State; and
- (5) to assure that any decision to permit increased air pollution in any area to which this section applies is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process.

# 42 USC § 7475. Preconstruction requirements

(a) Major emitting facilities on which construction is commenced No major emitting facility on which construction is commenced after August 7, 1977, may be constructed in any area to which this part applies unless--

- (1) a permit has been issued for such proposed facility in accordance with this part setting forth emission limitations for such facility which conform to the requirements of this part;
- (2) the proposed permit has been subject to a review in accordance with this section, the required analysis has been conducted in accordance with regulations promulgated by the Administrator, and a public hearing has been held with opportunity for interested persons including representatives of the Administrator to appear and submit written or oral presentations on the air quality impact of such source, alternatives thereto, control technology requirements, and other appropriate considerations:
- (3) the owner or operator of such facility demonstrates, as required pursuant to section 7410(j) of this title, that emissions from construction or operation of such facility will not cause, or contribute to, air pollution in excess of any (A) maximum allowable increase or maximum allowable concentration for any pollutant in any area to which this part applies more than one time per year, (B) national ambient air quality standard in any air quality control region, or (C) any other applicable emission standard or standard of performance under this chapter;
- (4) the proposed facility is subject to the best available control technology for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility;
- (5) the provisions of subsection (d) of this section with respect to protection of class I areas have been complied with for such facility;
- (6) there has been an analysis of any air quality impacts projected for the area as a result of growth associated with such facility;
- (7) the person who owns or operates, or proposes to own or operate, a major emitting facility for which a permit is required

under this part agrees to conduct such monitoring as may be necessary to determine the effect which emissions from any such facility may have, or is having, on air quality in any area which may be affected by emissions from such source; and

(8) in the case of a source which proposes to construct in a class III area, emissions from which would cause or contribute to exceeding the maximum allowable increments applicable in a class II area and where no standard under section 7411 of this title has been promulgated subsequent to August 7, 1977, for such source category, the Administrator has approved the determination of best available technology as set forth in the permit.

[...]

# 42 U.S.C.A. § 7477 Enforcement

The Administrator shall, and a State may, take such measures, including issuance of an order, or seeking injunctive relief, as necessary to prevent the construction or modification of a major emitting facility which does not conform to the requirements of this part, or which is proposed to be constructed in any area designated pursuant to section 7407(d) of this title as attainment or unclassifiable and which is not subject to an implementation plan which meets the requirements of this part.

# 42 U.S.C.A. § 7604 Citizen suits

(a) Authority to bring civil action; jurisdiction

Except as provided in subsection (b) of this section, any person may commence a civil action on his own behalf--

- (1) against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the Eleventh Amendment to the Constitution) who is alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation of (A) an emission standard or limitation under this chapter or (B) an order issued by the Administrator or a State with respect to such a standard or limitation,
- (2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator, or
- (3) against any person who proposes to construct or constructs any new or modified major emitting facility without a permit required under part C of subchapter I of this chapter (relating to significant deterioration of air quality) or part D of subchapter I of this chapter (relating to nonattainment) or who is alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation of any condition of such permit.

[...]

Case: 11-2328 Filed: 02/17/2012 Document: 006111219654 Page: 73 40 CFR Ch. I (7-1-11 Edition)

§ 52.18

#### §52.18 Abbreviations.

Abbreviations used in this part shall be those set forth in part 60 of this chapter.

[38 FR 12698, May 14, 1973]

### §52.20 Attainment dates for national standards.

Each subpart contains a section which specifies the latest dates by which national standards are to be attained in each region in the State. An attainment date which only refers to a month and a year (such as July 1975) shall be construed to mean the last day of the month in question. However, the specification of attainment dates for national standards does not relieve any State from the provisions of subpart N of this chapter which require all sources and categories of sources to comply with applicable requirements of the plan—

- (a) As expeditiously as practicable where the requirement is part of a control strategy designed to attain a primary standard, and
- (b) Within a reasonable time where the requirement is part of a control strategy designed to attain a secondary standard.

[37 FR 19808, Sept. 22, 1972, as amended at 39 FR 34535, Sept. 26, 1974; 51 FR 40676, Nov. 7,

## §52.21 Prevention of significant deterioration of air quality.

(a)(1) Plan disapproval. The provisions of this section are applicable to any State implementation plan which has been disapproved with respect to prevention of significant deterioration of air quality in any portion of any State where the existing air quality is better than the national ambient air quality standards. Specific disapprovals are listed where applicable, in subparts B through DDD of this part. The provisions of this section have been incorporated by reference into the applicable implementation plans for various States, as provided in subparts B through DDD of this part. Where this section is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. No disapproval with respect to a State's failure to prevent significant deterioration of air quality shall invalidate or otherwise affect the obligations of States, emission sources, or other persons with respect to all portions of plans approved or promulgated under this part.

- (2) Applicability procedures. (i) The requirements of this section apply to the construction of any new major stationary source (as defined in paragraph (b)(1) of this section) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the Act.
- (ii) The requirements of paragraphs (i) through (r) of this section apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this section otherwise provides.
- (iii) No new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) of this section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. The Administrator has authority to issue any such permit.
- (iv) The requirements of the program will be applied in accordance with the principles set out in paragraphs (a)(2)(iv)(a) through (f) of this section.
- (a) Except as otherwise provided in paragraphs (a)(2)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase (as defined in paragraph (b)(40) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.
- (b) The procedure for calculating (before beginning actual construction)

whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(2)(iv)(c) through (f) of this section. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is contained in the definition in paragraph (b)(3) of this section. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

- (c) Actual-to-projected-actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in paragraph (b)(41) of this section) and the baseline actual emissions (as defined in paragraphs (b)(48)(i) and (ii) of this section), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).
- (d) Actual-to-potential test for projects that only involve construction of a new emissions unit(s). A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph (b)(4) of this section) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph (b)(48)(iii) of this section) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

## (e) [Reserved]

(f) Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in paragraphs (a)(2)(iv)(c) through (d) of this section as applicable with respect to each

emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

- (v) For any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with the requirements under paragraph (aa) of this section.
- (b) *Definitions*. For the purposes of this section:
  - (1)(i) Major stationary source means:
- (a) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants (with thermal dryers), primary copper smelters, municipal incinerators capable charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, conversion plants, sintering plants. secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140), fossil-fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;
- (b) Notwithstanding the stationary source size specified in paragraph (b)(1)(i) of this section, any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant; or
- (c) Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1) of this section, as a major stationary

40 CFR Ch. I (7-1-11 Edition)

source, if the changes would constitute a major stationary source by itself.

- (ii) A major source that is major for volatile organic compounds or  $NO_{\rm X}$  shall be considered major for ozone.
- (iii) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
- (a) Coal cleaning plants (with thermal dryers);
  - (b) Kraft pulp mills;
  - (c) Portland cement plants;
  - (d) Primary zinc smelters;
  - (e) Iron and steel mills;
- (f) Primary aluminum ore reduction plants:
  - (g) Primary copper smelters;
- (h) Municipal incinerators capable of charging more than 250 tons of refuse per day:
- (i) Hydrofluoric, sulfuric, or nitric acid plants:
  - (j) Petroleum refineries;
  - (k) Lime plants;
  - (1) Phosphate rock processing plants;
  - (m) Coke oven batteries;
  - (n) Sulfur recovery plants;
- (o) Carbon black plants (furnace process);
  - (p) Primary lead smelters;
  - (q) Fuel conversion plants:
  - (r) Sintering plants;
- (s) Secondary metal production plants;
- (t) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
- (u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input:
- (v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
  - (w) Taconite ore processing plants;
  - (x) Glass fiber processing plants;
  - (y) Charcoal production plants;
- (2) Fossil fuel-fired steam electric plants of more that 250 million British thermal units per hour heat input, and
- (aa) Any other stationary source category which, as of August 7, 1980, is

being regulated under section 111 or 112 of the Act.

- (2)(i) Major modification means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(40) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(50) of this section); and a significant net emissions increase of that pollutant from the major stationary source.
- (ii) Any significant emissions increase (as defined at paragraph (b)(40) of this section) from any emissions units or net emissions increase (as defined in paragraph (b)(3) of this section) at a major stationary source that is significant for volatile organic compounds or NO<sub>X</sub> shall be considered significant for ozone.
- (iii) A physical change or change in the method of operation shall not include:
- (a) Routine maintenance, repair and replacement. Routine maintenance, repair and replacement shall include, but not be limited to, any activity(s) that meets the requirements of the equipment replacement provisions contained in paragraph (cc) of this section;

NOTE TO PARAGRAPH (b)(2)(iii)(a): By court order on December 24, 2003, the second sentence of this paragraph (b)(2)(iii)(a) is stayed indefinitely. The stayed provisions will become effective immediately if the court terminates the stay. At that time, EPA will publish a document in the FEDERAL REGISTER advising the public of the termination of the stay.

- (b) Use of an alternative fuel or raw material by reason of an order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas curtailment plant pursuant to the Federal Power Act;
- (c) Use of an alternative fuel by reason of an order or rule under section 125 of the Act:
- (d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- (e) Use of an alternative fuel or raw material by a stationary source which:

**Environmental Protection Agency** 

(1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166; or

(2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved

pursuant to 40 CFR 51.166;

- (f) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or 40 CFR 51.166.
- (g) Any change in ownership at a stationary source.
  - (h) [Reserved]
- (i) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
- (1) The State implementation plan for the State in which the project is located, and
- (2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- (j) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.
- (k) The reactivation of a very clean coal-fired electric utility steam generating unit.
- (iv) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under paragraph (aa) of this section for a PAL for that pollutant. Instead, the definition at paragraph (aa)(2)(viii) of this section shall apply.
- (v) Fugitive emissions shall not be included in determining for any of the purposes of this section whether a

- physical change in or change in the method of operation of a major stationary source is a major modification. unless the source belongs to one of the source categories listed in paragraph (b)(1)(iii) of this section.
- (3)(i) Net emissions increase means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
- (a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(2)(iv) of this section; and
- (b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline acemissions for calculating creases and decreases under this paragraph (b)(3)(i)(b) shall be determined as provided in paragraph (b)(48) of this section, except that paragraphs (b)(48)(i)(c) and (b)(48)(ii)(d) of this section shall not apply.
- (ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
- (a) The date five years before construction on the particular change commences; and
- (b) The date that the increase from the particular change occurs.
- (iii) An increase or decrease in actual emissions is creditable only if:
- (a) The Administrator or other reviewing authority has not relied on it in issuing a permit for the source under this section, which permit is in effect when the increase in actual emissions from the particular change occurs; and
- (b) The increase or decrease in emissions did not occur at a Clean Unit except as provided in paragraphs (x)(8) and (y)(10) of this section.
- (c) As it pertains to an increase or decrease in fugitive emissions (to the extent quantifiable), it occurs at an emissions unit that is part of one of the source categories listed in paragraph (b)(1)(iii) of this section or it occurs at an emission unit that is located at a major stationary source that belongs

§ 52.21

to one of the listed source categories.(iv) An increase or decrease in actual emissions of sulfur dioxide. particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

- (v) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- (vi) A decrease in actual emissions is creditable only to the extent that:
- (a) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions:
- (b) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins.
- (c) It has approximately the same significance for qualitative health and welfare as that attributed to the increase from the particular change; and
  - (vii) [Reserved]
- (viii) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes ational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes ational only after a reasonable shakedown period, not to exceed 180 days.
- (ix) Paragraph (b)(21)(ii) of this section shall not apply for determining creditable increases and decreases.
- (4) Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.
- (5) Stationary source means any building, structure, facility, or installation

which emits or may emit a regulated NSR pollutant.

- (6) Building, structure, facility, or installation means all of the pollutantemitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same first two digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).
  - (7) Emissions unit means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in paragraph (b)(31) of this section. For purposes of this section. there are two types of emissions units as described in paragraphs (b)(7)(i) and (ii) of this section.
- (i) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.
- (ii) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (b)(7)(i) of this section. A replacement unit, as defined in paragraph (b)(33) of this section, is an existing emissions unit.
- (8) Construction means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.
- (9) Commence as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:
- (i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(10) Necessary preconstruction approvals or permits means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

(11) Begin actual construction means, in general, initiation of physical onsite construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

(12) Best available control technology means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

- (13)(i) Baseline concentration means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:
- (a) The actual emissions, as defined in paragraph (b)(21) of this section, representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (b)(13)(ii) of this section; and
- (b) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.
- (ii) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):
- (a) Actual emissions, as defined in paragraph (b)(21) of this section, from any major stationary source on which construction commenced after major source baseline date; and
- (b) Actual emissions increases and decreases, as defined in paragraph (b)(21) of this section, at any stationary source occurring after the minor source baseline date.
- (14)(i) Major source baseline date means:
- (a) In the case of PM10 and sulfur dioxide, January 6, 1975;
- (b) In the case of nitrogen dioxide, February 8, 1988; and
- (c) In the case of PM<sub>2.5</sub>. October 20, 2010.
- "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the

relevant regulations. The trigger date is:

- (a) In the case of PM<sub>10</sub> and sulfur dioxide, August 7, 1977;
- (b) In the case of nitrogen dioxide, February 8, 1988; and
- (c) In the case of PM<sub>2.5</sub>. October 20, 2011.
- (iii) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
- (a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; and
- (b) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.
- (iv) Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that the Administrator shall rescind a minor source baseline date where it can be shown, to the satisfaction of the Administrator, that the emissions increase from the major stationary source, or net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM-10 emissions.
- (15)(i) Baseline area means any intrastate area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, as follows: equal to or greater than 1  $\mu$ g/m³ (annual average) for  $SO_2$ ,  $NO_2$ , or  $PM_{10}$ ; or equal or greater than 0.3  $\mu$ g/m³ (annual average) for  $PM_{2.5}$ .
- (ii) Area redesignations under section 107(d)(1)(A)(ii) or (iii) of the Act cannot intersect or be smaller than the area of

- impact of any major stationary source or major modification which:
- (a) Establishes a minor source baseline date; or
- (b) Is subject to 40 CFR 52.21 and would be constructed in the same state as the state proposing the redesignation.
- (iii) Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that such baseline area shall not remain in effect if the Administrator rescinds the corresponding minor source baseline date in accordance with paragraph (b)(14)(iv) of this section.
- (16) Allowable emissions means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:
- (i) The applicable standards as set forth in 40 CFR parts 60 and 61;
- (ii) The applicable State Implementation Plan emissions limitation, including those with a future compliance date: or
- (iii) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.
- (17) Federally enforceable means all limitations and conditions which are enforceable by the Administrator, including those requirements developed pursuant to 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.
- (18) Secondary emissions means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major

## **Environmental Protection Agency**

modification itself. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

- (i) Emissions from ships or trains coming to or from the new or modified stationary source; and
- (ii) Emissions from any offsite support facility which would not otherwise be constructed or increase its emissions as a result of the construction or operation of the major stationary source or major modification.
- (19) Innovative control technology means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.
- (20) Fugitive emissions means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- (21)(i) Actual emissions means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with paragraphs (b)(21)(ii) through (iv) of this section, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under paragraph (aa) of this section. Instead, paragraphs (b)(41) and (b)(48) of this section shall apply for those purposes.
- (ii) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source

operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

- (iii) The Administrator may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- (iv) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.
- (22) Complete means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

(23)(i) Significant means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

POLLUTANT AND EMISSIONS RATE

Carbon monoxide: 100 tons per year (tpy)

Nitrogen oxides: 40 tpy Sulfur dioxide: 40 tpy

Particulate matter: 25 tpy of particulate matter emissions

PM<sub>10</sub>: 15 tpy

PM<sub>2.5</sub>: 10 tpy of direct PM<sub>2.5</sub> emissions; 40 tpy of sulfur dioxide emissions; 40 tpy of nitrogen oxide emissions unless demonstrated not to be a PM<sub>2.5</sub> precursor under paragraph (b)(50) of this section

Ozone: 40 tpy of volatile organic compounds or nitrogen oxides

Lead: 0.6 tpy

Fluorides: 3 tpy

Sulfuric acid mist: 7 tov

Hydrogen sulfide (H2S): 10 tpy

Total reduced sulfur (including  $H_2S$ ): 10 tpy Reduced sulfur compounds (including  $H_2S$ ): 10 tpy

Municipal waste combustor organics (measured as total tetra-through octachlorinated dibenzo-p-dioxins and dibenzofurans):  $3.2 \times 10^{M6}$  megagrams per year  $(3.5 \times 10^{M6}$  tons per year)

Municipal waste combustor metals (measured as particulate matter): 14 megagrams per year (15 tons per year)

Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride): 36 megagrams per year (40 tons per year) Municipal solid waste landfills emissions (measured as nonmethane organic compounds): 45 megagrams per year (50 tons per year)

- (ii) Significant means, in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that paragraph (b)(23)(i) of this section, does not list, any emissions rate.
- Notwithstanding (iii) paragraph (b)(23)(i) of this section, significant means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 µg/m3, (24-hour average).
- (24) Federal Land Manager means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.
- (25) High terrain means any area having an elevation 900 feet or more above the base of the stack of a source.
- (26) Low terrain means any area other than high terrain.
- (27) Indian Reservation means any federally recognized reservation established by Treaty, Agreement, executive order, or act of Congress.
- (28) Indian Governing Body means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self government.
- (29) Adverse impact on visibility means visibility impairment which interferes the management, protection, with preservation or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (1) times of visitor use of the Federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility.
- (30) Volatile organic compounds (VOC) is as defined in §51.100(s) of this chap-
- (31) Electric utility steam generating unit means any steam electric generating unit that is constructed for the

purpose of supplying more than onethird of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(32) [Reserved]

- (33) Replacement unit means an emissions unit for which all the criteria listed in paragraphs (b)(33)(i) through (iv) of this section are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.
- (i) The emissions unit is a reconstructed unit within the meaning of §60.15(b)(1) of this chapter, or the emissions unit completely takes the place of an existing emissions unit.
- (ii) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
- (iii) The replacement does not alter the basic design parameters (as discussed in paragraph (cc)(2) of this section) of the process unit.
- (iv) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.
- (34) Clean coal technology means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.
- (35) Clean coal technology demonstration project means a project using funds appropriated under the heading "Department of Energy-Clean Coal Technology", up to a total amount of

\$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

- (36) Temporary clean coal technology demonstration project means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plans for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
- (37) (i) Repowering means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle. magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.
- (ii) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.
- (iii) The Administrator shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under section 409 of the Clean Air Act.
- (38) Reactivation of a very clean coalfired electric utility steam generating unit means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

- (i) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;
- (ii) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;
- (iii) Is equipped with low-NO<sub>X</sub> burners prior to the time of commencement of operations following reactivation; and
- (iv) Is otherwise in compliance with the requirements of the Clean Air Act.
- (39) Pollution prevention means any activity that through process changes, product reformulation or redesign, or substitution of less polluting raw materials, eliminates or reduces the release of air pollutants (including fugitive emissions) and other pollutants to the environment prior to recycling, treatment, or disposal; it does not mean recycling (other than certain "in-process recycling" practices), energy recovery, treatment, or disposal.
- (40) Significant emissions increase means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in paragraph (b)(23) of this section) for that pollutant.
- (41)(i) Projected actual emissions means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.
- (ii) In determining the projected actual emissions under paragraph (b)(41)(i) of this section (before beginning actual construction), the owner or operator of the major stationary source:

- (a) Shall consider all relevant information, including but not limited to, historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the State or Federal regulatory authorities, and compliance plans under the approved State Implementation Plan; and
- (b) Shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions; and
- (c) Shall exclude, in calculating any increase in emissions that results from he particular project, that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under paragraph (b)(48) of this section and that are also unrelated to the particular project, including any increased utilization due to product demand growth: or
- (d) In lieu of using the method set out in paragraphs (a)(41)(ii)(a) through (c) of this section, may elect to use the emissions unit's potential to emit, in tons per year, as defined under paragraph (b)(4) of this section.
  - (42) [Reserved]
- (43) Prevention of Significant Deterioration (PSD) program means the EPA-implemented major source preconstruction permit programs under section or a major preconstruction permit program that has been approved by the Administrator and incorporated into the State Implementation Plan pursuant §51.166 of this chapter to implement the requirements of that section. Any permit issued under such a program is a major NSR permit.
- (44) Continuous emissions monitoring system (CEMS) means all of the equipment that may be required to meet the data acquisition and availability requirements of this section, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.
- (45) Predictive emissions monitoring system (PEMS) means all of the equipment necessary to monitor process and con-

- trol device operational parameters (for example. control device secondary voltages and electric currents) and other information (for example, gas flow rate, O2 or CO2 concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.
- (46) Continuous parameter monitoring system (CPMS) means all of the equipment necessary to meet the data acquisition and availability requirements of this section, to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O2 or CO2 concentrations), and to record average operational parameter value(s) on a continuous basis.
- (47) Continuous emissions rate monitoring system (CERMS) means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).
- (48) Baseline actual emissions means the rate of emissions, in tons per year. of a regulated NSR pollutant, as determined in accordance with paragraphs (b)(48)(i) through (iv) of this section.
- (i) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5period immediately preceding when the owner or operator begins actual construction of the project. The Administrator shall allow the use of a different time period upon a determination that it is more representative of normal source operation.
- (a) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
- (b) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24month period.
- (c) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-

Pages 25-37 omitted

§ 52.21

That the applicable requirements of this section are otherwise met.

- (7) Variance by the Governor with the President's concurrence. In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the Administrator shall issue a permit pursuant to the requirements of paragraph (q)(7) of this section: Provided, That the applicable requirements of this section are otherwise met.
- (8) Emission limitations for Presidential or gubernatorial variance. In the case of a permit issued pursuant to paragraph (q) (5) or (6) of this section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of sulfur dioxide from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

# MAXIMUM ALLOWABLE INCREASE [Micrograms per cubic meter]

Period of exposure	Terrain areas	
	Low	High
24-hr maximum	36	62
3-hr maximum	130	221

(q) Public participation. The Administrator shall follow the applicable procedures of 40 CFR part 124 in processing applications under this section. The Administrator shall follow the procedures at 40 CFR 52.21(r) as in effect on June 19, 1979, to the extent that the procedures of 40 CFR part 124 do not apply.

- (r) Source obligation. (1) Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this section or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this section who commences construction after the effective date of these regulations without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.
- (2) Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Administrator may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within months of the projected and approved commencement date.
- (3) Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the State implementation plan and any other requirements under local, State, or Federal
- (4) At such time that a particular source or modification becomes a stationary source or major major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements or paragraphs (j) through (s) of this section shall apply to the source or modification as though construction had not yet commenced on the source or modification.
  - (5) [Reserved]
- (6) Except as otherwise provided in paragraph (r)(6)(vi)(b) of this section, the provisions of this paragraph (r)(6) apply with respect to any regulated NSR pollutant emitted from projects at existing emissions units at a major

# **Environmental Protection Agency**

stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility, within the meaning of paragraph (r)(6)(vi) of this section, that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant, and the owner or operator elects to use the method specified in paragraphs (b)(41)(ii)(a) through (c) of this section for calculating projected actual emissions.

- (i) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
  - (a) A description of the project;
- (b) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
- (c) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under paragraph (b)(41)(ii)(c) of this section and an explanation for why such amount was excluded, and any netting calculations, if applicable.
- (ii) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in paragraph (r)(6)(i) of this section to the Administrator. Nothing in this paragraph (r)(6)(ii) shall be construed to require the owner or operator of such a unit to obtain any determination from the Administrator before beginning actual construction.
- (iii) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in paragraph (r)(6)(i)(b) of this section; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design ca-

pacity or potential to emit that regulated NSR pollutant at such emissions

- (iv) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Administrator within 60 days after the end of each year during which records must be generated under paragraph (r)(6)(iii) of this section setting out the unit's annual emissions during the calendar year that preceded submission of the report.
- (v) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Administrator if the annual emissions, in tons per year, from the project identified in paragraph (r)(6)(i) of this section, exceed the baseline actual emissions (as documented and maintained pursuant to paragraph (r)(6)(i)(c) of this section), by a significant amount (as defined in paragraph (b)(23) of this section) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to paragraph (r)(6)(i)(c) of this section. Such report shall be submitted to the Administrator within 60 days after the end of such year. The report shall contain the following:
- (a) The name, address and telephone number of the major stationary source;
- (b) The annual emissions as calculated pursuant to paragraph (r)(6)(iii) of this section; and
- (c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
- (vi) A "reasonable possibility" under paragraph (r)(6) of this section occurs when the owner or operator calculates the project to result in either:
- (a) A projected actual emissions increase of at least 50 percent of the amount that is a "significant emissions increase," as defined under paragraph (b)(40) of this section (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant; or
- (b) A projected actual emissions increase that, added to the amount of emissions excluded under paragraph

(b)(41)(ii)(c) of this section, sums to at least 50 percent of the amount that is a "significant emissions increase," as defined under paragraph (b)(40) of this section (without reference to amount that is a significant net emissions increase), for the regulated NSR pollutant. For a project for which a reasonable possibility occurs within the meaning of paragraph (r)(6)(vi)(b) of this section, and not also within the meaning of paragraph (r)(6)(vi)(a) of this section, then provisions (r)(6)(ii) through (v) do not apply

(7) The owner or operator of the source shall make the information required to be documented and maintained pursuant to paragraph (r)(6) of this section available for review upon a request for inspection by the Administrator or the general public pursuant to the requirements contained in §70.4(b)(3)(viii) of this chapter.

to the project.

- (s) Environmental impact statements. Whenever any proposed source or modification is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this section shall be coordinated with the broad environmental reviews under that Act and under section 309 of the Clean Air Act to the maximum extent feasible and reasonable.
- (t) Disputed permits or redesignations. If any State affected by the redesignation of an area by an Indian Governing Body, or any Indian Governing Body of a tribe affected by the redesignation of an area by a State, disagrees with such redesignation, or if a permit is proposed to be issued for any major stationary source or major modification proposed for construction in any State which the Governor of an affected State or Indian Governing Body of an affected tribe determines will cause or contribute to a cumulative change in air quality in excess of that allowed in this part within the affected State or Indian Reservation, the Governor or Indian Governing Body may request the Administrator to enter into negotiations with the parties involved to resolve such dispute. If requested by

any State or Indian Governing Body involved, the Administrator shall make a recommendation to resolve the dispute and protect the air quality related values of the lands involved. If the parties involved do not reach agreement, the Administrator shall resolve the dispute and his determination, or the results of agreements reached through other means, shall become part of the applicable State implementation plan and shall be enforceable as part of such plan. In resolving such disputes relating to area redesignation, the Administrator shall consider the extent to which the lands involved are of sufficient size to allow effective air quality management or have air quality related values of such an area.

- (u) Delegation of authority. (1) The Administrator shall have the authority to delegate his responsibility for conducting source review pursuant to this section, in accordance with paragraphs (v) (2) and (3) of this section.
- (2) Where the Administrator delegates the responsibility for conducting source review under this section to any agency other than a Regional Office of the Environmental Protection Agency, the following provisions shall apply:
- (i) Where the delegate agency is not an air pollution control agency, it shall consult with the appropriate State and local air pollution control agency prior to making any determination under this section. Similarly, where the delegate agency does not have continuing responsibility for managing land use, it shall consult with the appropriate State and local agency primarily responsible for managing land use prior to making any determination under this section.
- (ii) The delegate agency shall send a copy of any public comment notice required under paragraph (r) of this section to the Administrator through the appropriate Regional Office.
- (3) The Administrator's authority for reviewing a source or modification located on an Indian Reservation shall not be redelegated other than to a Regional Office of the Environmental Protection Agency, except where the State has assumed jurisdiction over such land under other laws. Where the State has assumed such jurisdiction,